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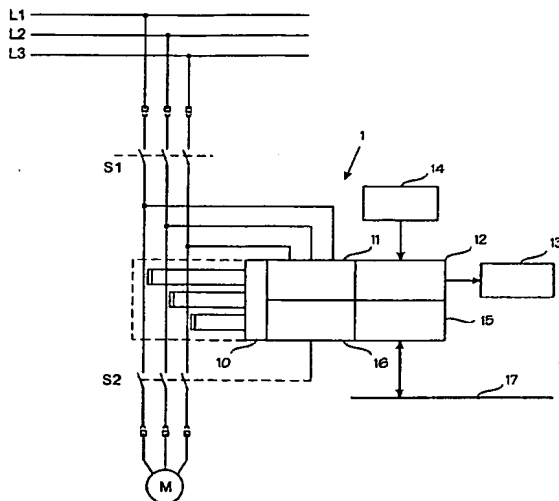
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— as to applicant's entitlement to apply for and be granted
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(54) Title: **THERMAL OVERLOAD PROTECTION**



(57) Abstract: A thermal overload protection (1) for an electrical device, particularly an electric motor (M), measures (10) a load current supplied to the electrical device (M), and calculates (16) the thermal load on the electrical device on the basis of the measured load current, and shuts off (S2) a current supply (L1, L2, L3) when the thermal load reaches a given threshold level. The protection comprises a processor system employing X-bit, preferably X=32, fixed-point arithmetic, wherein the thermal load is calculated by a mathematic equation programmed into the microprocessor system structured such that a result or a provisional result never exceeds the X-bit value.

WO 2005/074089 A1



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